

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** A device for providing a seal in an injection valve system including a housing, a first plunger, and a second plunger that translates relative to the first plunger during operation, the device comprising:

a first body which has a recess;

a second body which is introduced into the recess, wherein the second body moves relative to the first body during translation of the first plunger relative to the second plunger; and

an elastomer seal, which is inserted between the first and second body in the recess and thus in this area, closes and seals the space between the first and second body, wherein the elastomer comprises:

a first side;

a second side opposite the first side;

an outer circumferential surface located generally between the first and second sides and forming a seal with the first body;

an inner circumferential surface located generally between the first and second sides and forming a seal with the second body; and

a first groove formed in the first side of the elastomer seal and spaced apart from the outer circumferential surface of the elastomer seal, the first groove extending at least partly along the recess while located at a distance from the wall of the recess;

a second groove formed in the first side of the elastomer seal;

~~an elastomer seal positioned to close and seal the space between the first and second bodies;~~

a fluid chamber defined between the first plunger and the elastomer seal, wherein the elastomer seal prevents fluid in the fluid chamber from flowing past the elastomer seal and out of the fluid chamber, wherein the first side of the elastomer seal including the first and second grooves faces into the fluid chamber such that fluid pressure in the fluid chamber acts on the grooves to increase the sealing force of the elastomer seal; and

a tensioning means configured to support the elastomer seal in the space between the first and second bodies.

2. (Original) A device according to claim 1, wherein the first groove is embodied to run all the way around within the recess.

3. (Original) A device according to claim 1, wherein the first groove is at a distance of 0.2 to 1.5 mm from the wall of the recess of the first body.

4. (Currently Amended) A device according to claim 1, wherein ~~a~~ the second groove is embodied in the elastomer seal running radially inside the first groove.

5. (Currently Amended) A device according to claim 4, wherein the second groove is a distance of 0.2 to 1.5 mm from the position of the elastomer seal on the second body.

6. (Original) A device according to claim 4, wherein the first groove is deeper than the second groove.

7. (Original) A device according to claim 6, wherein the second groove is wide enough to open out into the first groove.

8. (Currently Amended) A device according to claim 1, wherein the areas of the first and second body against which the elastomer abuts are free of ridges or shoulders edges.

9. (Original) A device according to claim 1, wherein the first and second body are embodied as tubular shapes.

10. Cancelled.

11. Cancelled.

12. **(Currently Amended)** A chamber device according to claim [[11]] 1, wherein the ~~chamber~~ housing is welded to the first body and the plunger is welded to the second body.

13. **(Currently Amended)** A transfer device, which transfers a displacement of an actuator, comprising:

a housing, comprising a first recess in which a first and a second plunger are displaceably mounted,

wherein the first and the second plunger are effectively connected via at least one transfer chamber using a fluid, the effective connection causes a displacement of the second plunger if the first plunger is moved and vice versa, and wherein the transfer chamber is hydraulically connected via a sealing gap with a compensating chamber which provides delayed compensation for differences in pressure between the transfer chamber and the compensating chamber; and

a sealing system located at a first end of the housing, the sealing system including:

a first tubular body rigidly coupled to or integral with the housing;

a second body positioned inside the first tubular body, the second body rigidly coupled to or integral with the first plunger such that the second body moves relative to the first body during displacement of the first plunger relative to the second plunger; and

an elastomer seal positioned between the first tubular body and the second body, the elastomer seal including a first groove extending at least partly around the seal and located at a distance from an outer wall of the seal;

the elastomer seal closing and sealing the space between the first tubular body and the second body such that fluid in the compensating chamber is prevented from flowing past the elastomer seal;

a tensioning means configured to support the elastomer seal between the first tubular body and the second body rigidly coupled to or integral with the first plunger, the tensioning means acting on the elastomer seal but not acting on the first or second bodies.

14. **(Currently Amended)** A method for producing a device with a first body which has a recess and a second body which is introduced into the recess, and an elastomer, which is inserted into the space between the first and second body in the recess and thus closes and seals in this area the space between the first and second body, with the elastomer having a first groove which extends at least partly along the recess at a distance from the wall of the recess, the method comprising the steps of:

plasma-activating the first body and the second body;

providing the first body and the second body with a bonding agent in the areas in which the elastomer is to be applied; and

introducing and vulcanizing the elastomer such that the elastomer is positioned in the space between the first body and the second body;

configuring a ~~tensioning means~~ spring to act on a side of the elastomer to support the elastomer in the space between the first body and the second body, the spring acting on the elastomer seal but not acting on the first or second tubular bodies.

15. (Original) A transfer device according to claim 13, wherein the transfer device is for an injection valve.

16. (Previously Presented) A transfer device according to claim 13, wherein the elastomer comprises a first groove extending at least partly along the recess while located at a distance from the wall of the recess.